

# **WEAK OBJECT PRONOUN PLACEMENT IN LATER MEDIEVAL GREEK: INTRALINGUISTIC PARAMETERS AFFECTING VARIATION.**

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## **Abstract**

This paper presents some results from an in-depth analysis of the phenomenon of variation in weak object pronoun placement in Later Medieval Greek, focusing on the language-internal parameters that affect the variation. The findings reveal a complex pattern of variation that cannot be fully understood at this stage, and pose interesting questions for further investigation.

## **1 Introduction**

As has already been demonstrated in Pappas (2000, 2001) the pattern of weak object pronoun placement variation in Later Medieval Greek (12<sup>th</sup> to the 16<sup>th</sup> century) is a complex phenomenon. Following the Pappas (2000, vol. 54 in this series) discussion of the different effect that οὐ /u/ ‘not’ and ἂν οὐ /an u/ ‘if not’ have on the position of the pronoun (postverbal and preverbal, respectively), the present article is a detailed discussion of several intralinguistic parameters that appear to affect pronoun placement based on the in-depth analysis of the phenomenon presented in Pappas (forthcoming). It will be shown that, contrary to the standard opinion (Mackridge 1993, 1995, Janse 1994,

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1998, Janssen 1998, Horrocks 1997), neither emphasis on the element immediately preceding the verb-pronoun complex, nor the distinction between a focus element and a topic element determine pronoun position with respect to the verb. Furthermore, it is revealed for the first time that in a particular subset of constructions, namely in those cases known as ‘doubling pronoun’ constructions, the pattern of pronoun placement is markedly different when the ‘doubled’ element is the adjective ὅλος /olos/ ‘all’. Finally, the very intricate matter of pronoun placement with verb-forms other than the indicative and the subjunctive (i.e., the infinitive, the gerund, and the imperative) is examined in detail for the first time, and it is suggested that already in Later Medieval Greek, the imperative patterns more like the gerund than like the indicative, as is the case for Standard Modern Greek.

## 2 The database

The results presented here were based on the analysis of roughly 8,000 tokens of weak object pronoun placement. The tokens were collected from 27 texts which according to most philologists (cf. Beck 1993, Horrocks 1997) are the best representation of the vernacular of the period. In those cases where more than one manuscript exists for a particular text, only the one that is considered the closest to the original composition was used. When possible, approximately 1500 consecutive lines of text were extracted, and the tokens were manually listed and then coded according to the element that immediately precedes the verb-pronoun (or pronoun-verb) complex, in essence following Mackridge’s 1993 categorization of environments.

For the statistical analysis, the JMP 3.2.1 software for Macintosh was used to perform OneWay Anovas. Since the number of observations varies greatly from text to text, the only way the Anova can be successfully carried out is if these observations are transformed into scores that show normal distribution and have constant variance. To do this, I calculated the percentage that each one of these observations (e.g. number of postverbal tokens) constitutes over the total amount (number of postverbal+ number of preverbal) and then took the *arcsin* value of that percentage value. This is standard practice in statistics, and the transformation is known as the *arcsin transformation*. (Woods et al. 1983: 220). In this fashion a score ranging from 0 to 1.57... was entered for each text; if a particular construction did not occur at all in the text, that entry was left blank. These then are the numerical values for which a OneWay Anova was carried out.

In the graphs, the *x* axis lists the factors which are compared, while the *y* axis runs from 0 to 1.57 (the arcsin score). The dark squares represent where a particular text scores; larger squares indicate a score for multiple texts. According to the manual of the JMP software, the diamond-shaped figures are a schematic representation of the mean and standard error for each sample group. The line across the diamond represents the mean of the sample group, while the height of the diamond represents the 95% interval of confidence for each group. The tables labeled Tukey-Kramer HSD are the results of a test sized for all differences among means. As indicated at the bottom of each table, if

the number in a cell is positive that means that the difference between the two factors that make up the cell is significant.

### 3 Results and discussion

#### 3.1 Differentiation within the factor ‘reduplicated object’

As was mentioned in the introduction, the presence of the adjective ὅλος affects the pattern of variation associated with the ‘doubling pronoun’ construction<sup>1</sup>. This is a construction in which an object of the verb has a co-referent weak pronoun. The weak pronoun can co-refer either with a direct object (example (1)) or with an indirect object (example (2)).

- (1)      τὸ                      διάδημαν              παίρνει              το  
          to                      διαδιμαν              perni              to  
          the-Acc sg              crown-Acc sg              takes-3 Pres sg              it-DO sg WP  
          ‘The crown, he takes it’ (*Belisarios*, 42).

- (2)      τοὺς τριακοσίους              ἀφῆνω              σας  
          tus triakosius              afino              sas  
          the three hundred-Acc pl              leave-1 Pres sg              you-IO pl WP  
          ἀπὸ                      ἐνὸς                      φαρίου  
          apo                      enos                      fariu  
          from                      one-Gen sg                      horse-Gen sg  
          ‘To the three-hundred, I leave you each a horse’ (*Digenēs*, 1759).

According to Mackridge (1993: 340) in these circumstances the order verb + pronoun is “more or less obligatory”. However, as can be seen in Figure 3, in Appendix B, the pattern of pronoun placement that associated with ‘doubling pronoun’ constructions is significantly different from the pattern associated with other factors which Mackridge has also listed under the “more or less obligatory” category<sup>2</sup>. A closer examination of the data reveals that in most of the instances in which the ‘doubling pronoun’ appears preverbally, the doubled element is some form of the adjective ὅλος. Of the 118 tokens of the doubling pronoun construction there are 38 in which the element immediately preceding is a form of the adjective ὅλος. Of these 38, 24 show preverbal placement and 14 postverbal placement. If we exclude these tokens from the category of pronoun, there are 65 examples with postverbal placement and 15 examples showing preverbal placement (cf. Appendix A). This new pattern of variation, as it turns out is not

<sup>1</sup>This construction is usually referred to as ‘clitic doubling’. The term, however, makes crucial assumptions about the nature of these elements, which are not justified for LMG. Thus the theory neutral term ‘weak object pronoun’ is used.

<sup>2</sup>For an in-depth analysis of Mackridge’s article, and a thorough description of all aspects of the variation see Pappas (forthcoming).

significantly different from the patterns of variation for the other factors identified under Rule(1)<sup>3</sup>, as can be seen in Appendix B.

It is only natural to wonder why the adjective ὅλος should be associated with a pattern of pronoun placement that is the inverse of what we expect for the doubling pronoun construction. One possibility comes from the fact that the same adjective could take a weak pronoun as an argument in a partitive construction. Thus we find in texts examples such as the following:

- (3) ὅλοι                    τους                    τήν                    γρικῶσι  
oli                    tus                    tin                    yrikusi  
all-Nom sg    they-PS pl WP    she-DO pl WP    listen-3pl Pres  
'all of them hear it' (*Rimada*, 642).

In this case it is evident, not only from the accent markings, but also from the context, that τους is not an argument of the verb but of the adjective with a partitive sense. The sentence can be translated as 'All of them listen to it'.

However, in a sentence like example (4), we know that the weak pronoun is an argument of the adjective and give the translation 'and he defeated them all' (*Rimada*, 322) only because there is no accent on τους. The alternative interpretation, though, namely that τους is an argument of the verb, with a translation 'and all, he defeated them' is also possible. In fact, there is no reason to believe that this type of construction would be any clearer for listeners of LMG than for contemporary speakers, since the only disambiguating factor would have been the constraint that pronouns must follow the verb. It seems likely then, that, in sentences such as these, τους may have become ambiguous. It could be either a partitive pronoun qualifying the adjective or an argument of the verb.

- (4) καὶ                    ὅλους                    τους                    ἐνίκησε  
ke                    olus                    tus                    enikise  
and                    all-Acc pl                    they-PS pl WP    win-3sg Past

The crucial aspect of this ambiguity is that the partitive pronoun is of the same gender, number and case as the adjective, as indeed would have been the case for a weak object pronoun. Thus, the shift to constructions with ὅλος in which the pronoun is placed preverbally was most probably based on a four-part analogy, essentially a process in which the speaker/hearer extracted a pattern of matching gender/number/case marking in both the adjective and the pronoun based on the reanalyzed partitive construction (see Figure 1). This yielded constructions such as example (4) above and example (5), in which the 'doubling pronoun' appears preverbally.

<sup>3</sup> The negative adverb οὐ was excluded from this test since it is associated with categorical postverbal placement (see Pappas 2000 and Pappas (forthcoming) for a discussion of pronoun placement associated with οὐ).

- (5) ὅλην τήν ἡξεύρεις  
 oli tin iksevr̥is  
 all-Acc pl she-DO sg WP know-2sg Pres  
 ‘you know her completely’ (*Gioustos*, 184).

|       |   |      |
|-------|---|------|
| ὅλους | : | τους |
| ::    |   |      |
| ὅλην  | : | X    |
| X     | = | τήν  |

Figure 1: Four-part analogy schema for the change in pronoun placement in ὅλος construction.

### 3.2 The effect of emphasis on pronoun placement

Emphasis is an intralinguistic factor that Mackridge (1993) identifies as affecting the variation of pronoun placement. For him, the difference in pronoun placement between ‘object/adverb’<sup>4</sup>, ‘subject’, and ‘temporal expression’<sup>5</sup> is based on the fact that these elements are differently emphasized. His reasoning works as follows: the canonical word order of Later Medieval Greek is SVO, where the subject is covert more often than not. Thus, when an object (or adverb) (example (6)) is fronted it receives special emphasis which allows it to “attract” the pronoun to the preverbal position. Subjects are in a canonical position when they precede the verb and this “...does not necessarily result in its being specially emphasized” (Mackridge 1993: 320), which results in a less robust pattern of preverbal placement associated with preceding subjects. Finally, temporal expressions (example (7)) “...are not normally emphatic in themselves, but tend instead to place emphasis on the following verb...” (ibid: 322), which according to Mackridge weakens the preverbal placement pattern even more.

- (6) μανδᾶτον τὸν ἐδῶκα  
 mandaton ton edoka  
 message-Acc sg he-IO sg WP give-1sg Past  
 ‘I gave him a message’ (*Poulologos*, 576)

- (7) πάλε ἀπομιράζεις τα  
 pale apomirazis ta  
 again break up-2sg Pres they-DO pl WP  
 ‘again you break them up’ (*Poulologos*, 395)

<sup>4</sup> In this study preverbal objects, non-temporal adverbs and prepositional phrases are grouped together under the label ‘fronted constituent’ (see Figure 4 in appendix B).

<sup>5</sup> Mackridge uses the term ‘temporal adverb’ and refers to a few specific lexical items, namely, πάλιν /palin/ ‘again’, εὐθύς /efθ̥is/ ‘immediately’, τότε /tote/ ‘then’, and πάντα /panda/ ‘always’. Here, however, the category has been expanded to include all temporal expressions.

The first problem with Mackridge’s account is empirical. As can be seen in Figure 4 of appendix B, there is no significant difference between the factors ‘subject’ and ‘temporal expression’, and thus we should be looking for ways to explain their similarity not their difference. Moreover, Mackridge’s line of reasoning itself is problematic in several ways. To begin with, the argument is circular. While he asserts that it is the emphasized status of fronted objects that “attracts” the pronoun to the preverbal position at the beginning of his analysis, he then interprets the fact of “freer” placement in the case of temporal expressions as an indication that they are not as emphatic as fronted objects, thus explaining the difference in pronoun placement between ‘temporal expression’ and ‘object’. Secondly, in order for the ‘attraction’ mechanism to work, the ‘attracting’ element (whether subject, object, or adverb) would have to be a phonological host for the pronoun<sup>6</sup>, which is impossible. The pattern of secondary stress accents in LMG (essentially the same as SMG) clearly indicates that the verb is the only available phonological host for the pronoun, and it is difficult to justify how another element which does not bind the pronoun would affect its position. In a similar vein Wanner (1981b: 200) criticizes the use of the term attraction (*attraccão*) by prescriptivist grammarians in Portuguese; they too employed this vague term as an explanation of variation between preverbal and postverbal placement of ‘clitic’ pronouns. Wanner writes:

Attributing proclisis to the presence of particular words is satisfactory only in a framework which does not recognize linguistic structure beyond the level of abstractness of the word, i.e., the typical prescriptive grammar tradition; in addition, it is a confusion of cause and effect.

Finally, if emphasis does indeed ‘attract’ the pronoun to the preverbal position, full pronoun subjects should be associated with near categorical preverbal placement of the weak pronoun (cf. example (8)). This is expected because, as in any (so-called) ‘empty subject’ or ‘pro-drop’ language, full pronoun subjects in Later Medieval Greek should be an indication that there is emphasis placed on the subject—see Haberland and van der Auwera (1993). According to Mackridge’s hypothesis that emphasis is associated with preverbal placement, one would expect pronoun placement when the immediately preceding subject is a full pronoun to be significantly more preverbal than the pattern of pronoun placement when the immediately preceding subject is a noun phrase. However, the comparison test between the two patterns shows that there is no significant difference between them (cf. Appendix B).

|     |                |               |                         |               |
|-----|----------------|---------------|-------------------------|---------------|
| (8) | ἄλλος          | φιλεῖ         | τὴν                     | ἀγαπῶ         |
|     | allos          | fili          | tin                     | aɣapo         |
|     | another-Nom sg | kiss-3sg Pres | Rel. prn-Acc sg         | love-1sg Pres |
|     | κ’             | ἐγὼ           | στερεύομαι              | την           |
|     | kj             | eɣo           | sterevɔme               | tin           |
|     | and            | I-Nom sg      | to be deprived-1sg Pres | she-DO sg WP  |

<sup>6</sup>The necessity of this can be seen in Halpern’s (1996) treatment of Bulgarian clitics, in which he assumes that they are uniformly enclitic, despite evidence (Ewen 1979) that they may be at times proclitic.

‘Another man kisses the one I love and I am deprived of her’ (*Katalogia*, 434).

Thus, the emphatic status of the element preceding the verb complex does not seem to affect the placement of the pronoun.

### 3.3. Topic vs. Focus.

The possibility that discourse constraints may affect the placement of the pronoun, especially in cases where a subject immediately precedes the verb-pronoun complex, has been brought up by Janse in two papers (1994, 1998). There Janse claims that in Cappadocian Greek (which also shows variation between preverbal and postverbal pronoun placement) the pronoun is placed preverbally if the subject (especially subject pronouns) “constitute the information focus of the respective utterances, since they carry new information” (cf. example (9) taken from Janse 1998).

- |     |                     |             |                 |
|-----|---------------------|-------------|-----------------|
| (9) | tis                 | t           | álakse          |
|     | who-Nom sg          | it-DO pl WP | change-3sg Past |
|     | ογο                 | d           | álaksa          |
|     | I-Nom sg (EMPHATIC) | it-DO pl WP | change-1sg Past |
- ‘— Who changed them?  
— I changed them’

However, Janse does not show that being the information focus of an utterance is the necessary and sufficient condition for preverbal placement, since he does not discuss examples with subject pronouns (or nominal subjects for that matter) and postverbal object pronoun placement to show that in these cases the subject is not the information focus of the utterance. Furthermore, it can be shown that in the LMG texts this distinction does not affect the placement of the pronoun; the two passages below come from the same text and have the same interpretation with respect to the Focus/Topic distinction, yet the pronoun is placed postverbally in one and preverbally in the other.

- |      |                 |                 |                  |     |                      |
|------|-----------------|-----------------|------------------|-----|----------------------|
| (10) | όκάποτ’         | άπεσώσασιν,     | ήλθαν            | εις | τò Μοντόριον         |
|      | okapot          | apesosasin      | ilthan           | is  | to montorion         |
|      | sometime        | finish-3pl Past | come,-3pl Past   | to  | the Montorion-Acc sg |
|      | ό δουξ          | τους            | αποδέχθηκεν      |     |                      |
|      | o ðuks          | tus             | apoðexθiken      |     |                      |
|      | the duke-Nom sg | they-DO sg WP   | receive-3sg Past |     |                      |
- ‘In time they finished [their journey], they came to Montorion. /  
The duke received them ...’ (*Phlōrios*, 303-304).

- |      |               |          |         |   |            |
|------|---------------|----------|---------|---|------------|
| (11) | καβαλλικεύουν | άρχοντες | ύπάγουν | ς | τò παλάτι, |
|      | kavallikevun  | arxondes | ipayun  | s | to palati  |

|               |             |             |                      |
|---------------|-------------|-------------|----------------------|
| ride-3pl Pres | lord-Nom pl | go-3pl Pres | to the palace-Acc sg |
| κι ὁ βασιλεὺς | ἐδέχθη      | τους        |                      |
| c o vasilēfs  | edexθin     | tus         |                      |

and the king-Nom sg receive-3sg Past they-DO sg WP

‘The lords ride, they go to the palace, /  
and the king received them...’ (*Phlōrios*, 938-939).

Nevertheless, this distinction between a focus and topic reading could prove useful when examining preverbal objects. As Androulakis (1998)<sup>7</sup> points out, in Standard Modern Greek a preposed object with a focus reading is distinguished by an object that is a topic by the fact that in the latter case a ‘doubling pronoun’ is used.

- (12) τον Νικολή                    τον                    θαυμάζω                    για την υπομονή του  
 ton nikoli                    ton                    thanmazo                    ja tin ipomoni tu  
 Nikolis-Acc sg/TOP    he-DO sg WP    admire-1sg Pres    for his patience  
 ‘Nikolis, I admire him for his patience’ (Androulakis 1998: 150).

- (13) τον ΝΙΚΟΛΗ                    θαυμάζω                    για την υπομονή του  
 ton nikoli                    thanmazo                    ja tin ipomoni tu  
 Nikolis-Acc sg/FOC    admire-1sg Pres    for his patience  
 ‘It is Nikolis that I admire for his patience’ (Androulakis 1998: 150).

However, it is not certain that this was the case for LMG. In fact, without the necessary prosodic information (i.e. information about sentence stress), this distinction between topic and focus is hard to confirm based on the surrounding context alone. Take for example the following two clauses that appear one after the other in the poem *Thrēnos tes Kōnstantinoupoleōs*:

- (14) ἐγίνηκε                    Ἀντίχριστος,                    τὸν κόσμον                    σακτανίζει  
 eginike                    andixristos                    ton kosmon                    saktanizi  
 became                    antichrist                    the world-Acc sg                    bedevils-3sg Pres  
 τὸ γένος                    τὸ Ῥωμαϊκὸν                    ἐκαταδούλωσέν                    το  
 to genos                    to romaikon                    ekatadulosen                    to  
 the race-Acc sg    the Roman-Acc sg    enslave-3sg Past    it-DO sg WP  
 ‘He became the antichrist, he bedevils the world, the Roman race, he enslaved it’  
 (*Thrēnos*, 601-2).

There do not seem to be any contextual factors that would make the two objects τὸν κόσμον, and τὸ γένος τὸ Ῥωμαϊκὸν different with respect to the focus-topic distinction. Similar examples can be found throughout the corpus. Thus, although there is good reason to believe that the distinction between focus and topic is the reason for the use (or not) of a doubling pronoun in SMG, the same claim cannot be made for LMG.

<sup>7</sup> See also Warburton (1975), Kazazis & Pentheroudakis (1976), Horrocks (1983), Joseph (1983b), Mackridge (1985), Stavrou (1985), and Philippaki-Warburton (1985).



### 3.4 Non-finite forms of the verb

It is reasonable to investigate whether or not the status of the verb-form (finite or non-finite) plays a role in the placement of pronouns in Later Medieval Greek as this has been accepted as the determining factor in Standard Modern Greek. There the pronouns appear preverbally (cf. (15) and (16), except when the verb is a gerund (17), or an imperative<sup>8</sup>, (18) in which case they appear postverbally.

- (15) τον                      είδα  
       ton                    iða  
       he-DO sg WP    see-1sg past  
       ‘I saw him.’

- (16) τον                      Αντώνη,                      τον                      είδα  
       ton                    adoni                    ton                    iða  
       the-Acc sg        Anthony-Acc sg        he-DO sg WP        see-1sg past  
       ‘Anthony, I saw him.’

- (17) a. βλέποντάς        το  
       vlepondas        to  
       see-gerund        it-DO sg WP  
       ‘Seeing it, ...’

- b. Μη                      βλέποντάς        το  
       mi                    vlepodas        to  
       not                   see-gerund        it-DO sg WP  
       ‘Not seeing it...’

- (18) δώσε                      μού                      το  
       ðose                    mu                    to  
       give-2 sg Imper    I-IO sg WP        it-DO sg WP  
       ‘Give me it!’

The fact that the imperative verb-form, and the clearly non-finite gerund both show the same pattern of postverbal pronoun placement, coupled with the observation that the imperative is morphologically marked only for number has been interpreted as an

<sup>8</sup> Joseph (1978/1990, 1983a), and Nevis & Joseph (1992) mention that the past passive participle may have a weak pronoun argument in some rare cases. The example they cite

δεχόμενος                      το  
 dechomenos                    to  
 accept-Past Pass. Partic Nom sg    it-DO sg WP  
 ‘Accepting it’.

I did not encounter any such examples in my research of the Medieval texts.

indication that in SMG the imperative is a non-finite form (Joseph 1978/1990, 1983a, 1985, Mackridge 1985, Joseph & Warburton 1987, Horrocks 1990, Nevis & Joseph 1992).

In Later Medieval Greek, on the other hand, there are three clearly non-finite forms, the participle (present active, or perfect passive), the gerund and the infinitive. As in SMG the LMG imperative is marked only for number, although in some texts there are also 3<sup>rd</sup> person forms of the imperative which are most likely archaisms. In the next sections I examine the position of weak object pronouns with these verb-forms.

### 3.4.1 Participles

#### 3.4.1.1 The Present Active Participles

These forms show marking for gender, number, and case as in Ancient Greek. There are 8 examples of pronoun placement with present active participle in the database, most of them from *Ptōkhoprodromos*. Some examples are given below.

- (19) ἀτίμως                      μοι                      λαλοῦσα  
atimos                          mi                          lalusa  
deceitfully-Adverb    I-IO sg WP            speak-Pres. Act. Prcle  
'speaking to me deceitfully' (*Ptōkhoprodromos*, I 155).

- (20) ταῦτα                      μοι                      προσοιποῦσα  
tafta                          mi                          prosipusa  
this-Acc pl            I-IO sg WP            tell-Pres. Act. Prcle  
'Telling me these things' (*Ptōkhoprodromos*, I 198).

- (21) καὶ                      συνβυθίζουσάν                      με  
ke                          sinviθizusan                          me  
and                      sink-Pres. Act. Prcle                      I-DO sg WP  
'And sinking me' (*Ptōkhoprodromos*, IV 243).

- (22) καὶ σῶον                      σέ                      φυλάττων  
ke soon                          se                          filaton  
and safe-Acc sg            you-DO sg WP            keep-Pres. Act. Prcle  
'and keeping you safe' (*Glykas*, 341).

- (23) τὸν                      καταφλέξαντά                      σε  
ton                          katafleksanda                          se  
the-Acc sg            burn thoroughly-Pres. Act Prcle                      you-DO sg WP  
'The one who burnt you thoroughly' (*Achilleid*, 1410).

It is generally accepted (Horrocks 1997: 78) that the use of the present active participle in *Ptōkhoprodromos* is an archaizing aspect of his mixed language, and as such I will not be concerned with the relationship between these forms and pronoun placement.

### 3.4.1.2 Perfect Passive Participles

These are forms in  $-\mu\acute{\epsilon}\nu\omicron\varsigma$  mostly used as adjectives or as complements of the verb  $\acute{\epsilon}\chi\omega$  [exo] ‘I have’ in the perfect periphrasis (or its past form  $\acute{\epsilon}\lambda\chi\alpha$  in the pluperfect periphrasis—so Horrocks 1997: 304). There are only four instances of these constructions with a pronoun, and in all of them the pronoun is placed preverbally before the  $\acute{\epsilon}\chi\omega$  form as in the example (24).

- |      |                          |  |   |
|------|--------------------------|--|---|
| (24) | $\sigma\acute{\epsilon}$ | $\tau\acute{o}\rho\omicron$                    | $\acute{\epsilon}\pi\iota\tau\eta\delta\iota\omicron$ |
|      | se                       | topo   | epitiðio  |
|      | in-preposition           | place-Acc sg                                   | clever-Acc sg   |
|      | $\tau\grave{\alpha}$     | $\acute{\epsilon}\lambda\chi\alpha\sigma\iota$ | $\beta\alpha\lambda\mu\acute{\epsilon}\nu\alpha$      |
|      | ta                       | ixasi  | valmena   |
|      | it-DO sg WP              | have-3 pl Past                                 | place-Perf. Pass Prcle                                |
- ‘They had placed them in a clever place’ (*Rimada*, 834).

Despite what seems here an obvious incorporation of the perfect passive participle arguments by the  $\acute{\epsilon}\chi\omega$  form, it was not necessary that the two forms be adjacent as can be seen in example (25) where the adverb  $\delta\hat{\omega}$  can be interpolated between the  $\acute{\epsilon}\chi\omega$  form and the participle.

- |      |                      |                                 |                      |   |
|------|----------------------|---------------------------------|----------------------|---|
| (25) | $\tau\grave{\alpha}$ | $\mu\acute{o}\chi\epsilon\iota$ | $\delta\hat{\omega}$ | $\gamma\rho\alpha\mu\mu\acute{\epsilon}\nu\alpha$ |
|      | ta                   | moxi                            | ðo                   | gramena   |
|      | which-Rel prn        | I-IO sg+have-3sg Pres           | here-Adverb          | write-Perf. Pass Prcle                            |
- ‘which he has written to me here’ (*Rimada*, 716).

### 3.4.2 Gerunds

These forms, although clearly derived from the above mentioned present active participles, show no gender, number, or case agreement. Instead they vary between a form with final ( $\varsigma$ ) and one without it. The final ( $\varsigma$ ) is most likely due to analogical spreading, either from the masculine nominative singular or from the adverbial ( $\varsigma$ ) (see Horrocks 1997: 229). There are several constructions of a gerund with a weak pronoun argument; they are all found in later texts (15<sup>th</sup> and early 16<sup>th</sup> century) and in all of them the pronoun appears postverbally as in (26) and (27):

- (26) ἐγὼ                      θωρώντα                      σε  
 εὔο                      θορόντα                      σε  
 I-Nom sg              look-Gerund              you-DO sg WP  
 ‘I, looking at you’ (*Rhodos*, 211)

- (27) καὶ                      δίνοντάς                      τονε  
 κε                      δίνοντας                      τονε  
 and                      give-Gerund                      he-IO sg WP  
 ‘and giving him’ (*Tribōlēs*, 275)

The unfortunate gap in the data is that there are no instances of a negated gerund (μὴ + gerund) with a weak object pronoun. Such examples would provide crucial information concerning the interaction between the finiteness of the verb-form and pronoun placement (with putative examples such as \*ἐγὼ μὴ θωρώντα σε indicating that the non-finite verb-forms have postverbal pronouns only). Although no firm conclusion can be reached in their absence, it is my intuition that postverbal pronouns may have been the categorical placement in this context.

### 3.4.3. Infinitive

#### 3.4.3.1 Articular infinitive

In this type of infinitival construction a definite article is added to the infinitive, which is used either as the complement of a preposition (28) or a verb (29), as a clause with a final sense (30) or as a nominalized adjunct (31) (Horrocks 1997: 98, 280).

- (28) εἰς                      τὸ                      εὐεργετῆσαι                      σοι  
 is                      to                      everygetise                      si  
 towards-preposition      the-Acc sg              benefit-Infin.              you-IO sg WP  
 ‘towards benefiting you’ (*Spanos*, 690).

- (29) ἥρξατο                      τοῦ                      γελᾶν                      με  
 irksato                      tu                      γελᾶν                      με  
 begin-3sg Past              the-Gen sg              laugh-Infin.              I-DO sg WP  
 ‘He began to make fun of me’ (*Ptōkhoprodromos*, I 190).

- (30) χρόνον ... ἀνάλωσα                      ...τοῦ                      εὕρεῖν                      σε  
 xronon ... analosa                      ... tu                      evrin                      σε  
 time ... I spent                      ... the-Gen sg                      find-Infin.                      you-DO sg WP  
 ‘I spent [much] time in order to find you’ (*Spanos*, 606).

- (31) Τὸ                      ἰδεῖν                      τα

|            |            |             |
|------------|------------|-------------|
| to         | iðin       | ta          |
| the-Acc sg | see-Infin. | it-DO pl WP |

“Upon seeing them” (*Digenēs*, 785).

In all of these uses the pronoun is always placed postverbally.

### 3.4.3.2 Infinitive as the complement of a verb

Despite facing competition from finite complementation constructions (Joseph 1978/1990, Browning 1983, Joseph 1983a, Horrocks 1997) an infinitival complement is still a possibility in the texts of Later Medieval Greek. Most of these appear in the periphrases of the future tense (θέλω ‘I want’ + infinitive) (ex.(32), conditional (ἤθελα ‘I wanted’ + infinitive) (ex. (33) and the pluperfect<sup>9</sup> (εἶχα ‘I had’ + infinitive) (ex. (34), but there are also some examples of a standard infinitival complement (ex. (35).

|      |               |            |             |
|------|---------------|------------|-------------|
| (32) | θέλεις        | μὲ         | κοπιάσῃν    |
|      | thelis        | me         | kopiasin    |
|      | want-2sg Pres | I-DO sg WP | tire-Infin. |

‘Will you tire me?’ (*Digenēs*, 1390).

|      |      |               |                     |
|------|------|---------------|---------------------|
| (33) | ὅταν | ἤθελες        | δοξασθῇν            |
|      | otan | iθelis        | ðoksasθin           |
|      | when | want-2sg Past | glorify-Pass Infin. |

‘When you would be glorified’ (*Digenēs*, 252).

|      |    |                            |            |
|------|----|----------------------------|------------|
| (34) | ἄν | τόχα                       | ξεύρειν    |
|      | an | toxa                       | ksevrin    |
|      | if | it-Acc sg. + have-1sg Past | know-Infin |

‘If I had known it’ (*Katalogia*, 321).

|      |            |               |               |            |
|------|------------|---------------|---------------|------------|
| (35) | ἐσὺ        | τολμάς        | ὕβριζῃν       | μὲ         |
|      | esi        | tolmas        | ivrizin       | me         |
|      | you-Nom sg | dare-2sg Pres | insult-Infin. | I-DO sg WP |

‘You dare to insult me?’ (*Poulologos*, 99).

Mackridge (1993: 338) only discusses the cases of θέλω and ἤθελα periphrases for which he states that “the future and volitive construction + infinitive is quite straightforward as long as one bears in mind that the pronoun attaches itself to θέλω rather than to the infinitive.” What Mackridge overlooks in this assumption, however, is

<sup>9</sup>According to Joseph (1983a:64, 2000), Horrocks (1997:304) the present perfect periphrasis with the present tense of εἶχα ‘I have’ was modelled on the pluperfect form at a much later time.

that, since the pronouns must appear adjacent to the verb that selects them as arguments, attachment to θέλω implies incorporation of the semantic arguments of the infinitival form as syntactic arguments of the θέλω form (cf. Joseph 1978/1990). And although this may be a possibility for the future constructions (as it was for the ἔχω + passive participle periphrases) there is no evidence that it also occurred in volitive constructions. Perhaps, though, Mackridge's mention of "future and volitive construction" is merely a way to avoid the controversy over the meaning of these θέλω + infinitive constructions.

Nonetheless, according to this assumption the contrast between (36) and (37) is explained as follows: in (36) the pronoun attaches to θέλει, and is 'attracted' to the preverbal position by the relative pronoun ὅπου (according to his Rule 2). On the other hand, in (37) the pronoun once again attaches to θέλει, but this time it appears postverbally, because the complex follows immediately after the negative adverb οὐ (Mackridge's Rule 1b).

- (36) ὅπου μὲ θέλει πάρει  
 opu me theli pari  
 which me-DO sg WP want-3sg, Pres take-Infin.  
 'which will take me' (*Digenēs*, 1769).

- (37) οὐ θέλει τὲς πομείνει  
 u theli tes pomini  
 not want-3sg Pres it-DO pl WP suffer-Infin.  
 'He will not suffer them' (*Rimada*, 1016).

The question of which of the two verbs is the host of the pronoun is important; for if Mackridge is correct that the θέλω form is always the host, then these constructions will have nothing to contribute to our discussion of weak pronoun placement with non-finite verb-forms.

One problematic aspect of Mackridge's analysis concerns the accentuation of the pronoun. If Mackridge is correct that the pronoun attaches to the θέλω form then in those cases in which it appears postverbally, the pronoun should be enclitic to the θέλω form. And if this is true, then one would expect that when the pronoun appears after a three syllable form of θέλω (such as ἤθελα) the rule of secondary stress should take effect, adding an accent to the last syllable of the verb. This prediction, however, is not borne out in the case of θέλω periphrastic constructions, as in example (38), in which we see that the pronoun does not affect secondary stress on ἤθελα.<sup>10</sup>

<sup>10</sup> There is one other example from *Kallimakhos*, ln 651

|             |              |               |            |
|-------------|--------------|---------------|------------|
| λαβείν      | γυνῆκα       | ἤθελέ         | μὲ         |
| lavín       | gineka       | iθele         | me         |
| take-Infin. | woman-Acc sg | want-3sg Past | I-DO sg WP |

- (38) ὡς                      μῆρμυκα                      καὶ                      κώνωπα  
 os                      mirmika                      ke                      konopa  
 like                      ant-Acc sg                      and                      mosquito-Acc sg  
 ἤθελα                      τὸν                      συντρίψειν  
 iθela                      ton                      sindripsin  
 want-1sg Past                      he-DO sg WP                      crush-Infin.

“Like an ant and a mosquito I would have crushed him” (*Achilleid*, 1696).

If the pronoun were enclitic to ἤθελα it would be written ἤθελα τον. The fact that in these circumstances the pronoun does not pattern as an enclitic would casts doubt on Mackridge’s statement that the pronoun always attaches itself to the θέλω form. Another argument against Mackridge’s implicit assumption that θέλω future periphrases always involve ‘argument incorporation’ is that the infinitive can in some cases be preposed, as in example (39); such ‘freedom of movement’ is considered as evidence against ‘argument incorporation’ (cf. Abeille & Godard 1996).

- (39) εὕρεῖν                      τήν                      θέλω  
 evrin                      tin                      thelo  
 find-Infin.                      she-DO sg WP                      want-1sg Pres

‘I will find her’ (*Phlōrios*, 267).

If this were true, the pronoun in these cases should remain both the semantic and syntactic argument of the infinitive, which in turn means that the pronoun would be ‘enclitic’ and according to the system of written accents an ‘enclitic’ pronoun is not written with an accent. In this research, out of the 10 instances of a future periphrasis with a preposed infinitive, 8 of them have a written accent on the pronoun. Thus instances such as (39) may be an indication that the pronoun is attached to the θέλω form, and subsequently that ‘argument incorporation’ has taken place, despite the counterevidence provided by the preposed infinitive. The two non-conforming examples are:

- (40) ἐγὼ                      δώσει                      τες                      ἤθελα  
 ego                      dosi                      tes                      iθela  
 I-Nom sg                      give-Infin.                      she-DO pl WP                      want-1sg Past

‘I would have given them’ (*Rimada*, 1270).

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This is a troubling example, however. First of all, it seems to have a volitional meaning—Pichard translates it as “voulait m’epouser”—and this makes the separation between the Infinitive and its object pronoun surprising. Moreover, the infinitive is in the first hemistich while the rest of the VP is in the second hemistich (see chapter 6 for more details about the meter of the poetry). Thus, this construction is extraordinary for a variety of reasons, and basing conclusions on it is not recommended.

- (41) χάρισει                      του                      τήν                      θέλω  
 xarisi                      tu                      tin                      thelo  
 grant-Infin.                      he-IO sg WP                      she-DO sg WP                      want-1sg Pres  
 ‘I will grant her to him’ (*Lybistros*, 2510).

Example (41) is particularly telling because if one were to adhere to what the written accents indicate, then the IO του and the DO τήν do not form a cluster, as the IO attaches to the infinitive and the DO to θέλω. This is indeed quite surprising and casts serious doubt as to whether the written accents can be trusted as a guide at this intersection of two highly volatile constructions: weak pronoun placement and the future periphrasis construction.

On the other hand, the data do confirm the view that from the perspective of pronoun placement it seems as if the pronoun is attached to the θέλω form, as Mackridge has asserted. Appendix A presents the results of coding the tokens of θέλω periphrasis with a weak object pronoun, according to the character of the immediately preceding element, namely whether it is associated with preverbal or postverbal placement, or it is somewhat neutral towards placement. Thus, ‘postverbal environment’, includes factors such as ‘initial’, ‘co-ordinating conjunction’, ‘doubling pronoun’, ‘οὐ’ and so forth; in ‘preverbal placement’ factors ‘function word’ and ‘fronted constituent’ are included, whereas ‘neutral’ (for lack of a better term) includes ‘subject’ and ‘temporal expression’<sup>11</sup>. As the table shows, in θέλω periphrases with a ‘postverbal environment’ the pronoun is placed between θέλω and the infinitive 42 out of 44 times; in ‘preverbal environments’ the pronoun appears to the left of θέλω 35 out of 39 times, while in ‘neutral environments’ there are 8 post-θέλω tokens and four pre-θέλω tokens.

The only clear evidence is that ‘argument incorporation’ happens at least sometimes, i.e. when the pronoun appears to the left of θέλω. In the absence of any conclusive evidence concerning the host of pronouns that appear between the θέλω form and the infinitive, it seems more straightforward to adopt the idea that all the periphrastic tense constructions involve some type of ‘argument incorporation’ mechanism, but note that this seriously challenges the notion that such mechanisms lead to a strong linear adjacency requirement.

With respect to true complement infinitives, it can be said that these constructions are rare, and appear mostly in texts before the 14<sup>th</sup> century (*Digenēs*, *Ptōkhoprodomos*, *Spaneas*, *Glykas*, *Poulologos*, *Moreas*). The specific verbs found with an infinitive complementizer in the corpus are ἀρχίζω /arxizo/ ‘I begin’, (ἡ)μπορώ /imboro/ ‘I am able to’, ἐλπίζω /elpizo/ ‘I hope’, θάρρῶ /tharo/ ‘I dare’, and τολμῶ /tolmo/, also “I dare”. There are 10 examples, and in 7 of them the pronoun appears after the infinitive as in example (35) above and (42):

- (42) ἤρξατο                      εὔχεσθαί                      του

<sup>11</sup> For a full description of what these categories include, see Pappas (forthcoming).



|                |             |             |
|----------------|-------------|-------------|
| irksato        | εἴxesθε     | tu          |
| begin-3sg Past | wish-Infin. | he-IO sg WP |

‘she began to wish him ...’ (*Digenēs*, 810).

However, since these constructions seem to be archaisms (note the use of the ‘-σθαί’ infinitive in (42)), it may also be that the pattern of pronoun placement associated with them is also archaic.

The evidence available from the LMG texts does not lead to any clear conclusions about the placement of pronouns that are arguments of non-finite verb-forms. It seems though, that texts from before the 14<sup>th</sup> century have both a wider range of non-finite forms and variation between preverbal and postverbal pronoun placement in association to them. In texts dating after the 14<sup>th</sup> century, if the thorny issue of periphrastic tenses is put aside, the available non-finite verb-forms are gerunds and articular infinitives which are basically semantically equivalent; and the placement of the pronouns in this context is robustly postverbal. When these facts are compared with the situation in SMG (cf. examples (15)-(18)) it is clear that at least the beginning of the partition of weak pronoun placement according to the finiteness of the verb-form is found in 14<sup>th</sup> century texts. Now that the evidence for the uncontroversially non-finite forms has been established, an examination of pronoun placement with the imperative is in order.

### 3.4.4 Imperative

When the verb is in the imperative form the placement of the weak object pronoun seems to vary in much the same way that it does for the finite verb-forms, the indicative and the subjunctive. Mackridge (1993: 330) is convinced of this as he emphatically states that:

It must be stressed that Rule 3 is valid as much for the imperative as for finite forms of the verb:

- |      |              |            |                    |
|------|--------------|------------|--------------------|
| (43) | Ἀλλὰ         | μὲ         | εἰπὲ <sup>12</sup> |
|      | alà          | mε         | ipe                |
|      | other-Acc pl | I-DO sg WP | say-2sg Imper      |
- ‘Tell me something else’ (*Digenēs*, 670)
- 
- |      |                 |            |             |                 |
|------|-----------------|------------|-------------|-----------------|
| (44) | τρεῖς ἵγγλες    | μοῦ        | τὸ          | ἵγκλωσε         |
|      | tris iggles     | mu         | to          | igglose         |
|      | 3 saddle straps | I-IO sg WP | it-DO sg WP | strap on-Imp sg |
- ‘Strap it [the horse] for me, three saddle straps’ (*Digenēs*, 800)

<sup>12</sup> Mackridge only gives the Greek text but I included the broad transcription and translation, for readers not familiar with the language.

The placement of the pronoun before an imperative is absolutely standard in such circumstances in texts from the twelfth to the fifteenth centuries, irrespective of geographical provenance; it is found not only in the Escorial *Digenes Akrites* but in Ptochoprodromos, the Chronicle of the Morea, and practically every other text in which the imperative is used.

The textual evidence, however, does not support the characterization “absolutely standard”. Before delving into the details, though, one must consider how an accurate comparison between the finite forms and the imperative forms can be conducted. First, the environments in which either a finite form or an imperative form could appear need to be separated from the rest. As such, all environments listed in Mackridge’s Rule (2)—essentially relative pronouns, mood markers and *wh*-phrases—must be excluded, since the imperative cannot appear in those contexts. Next, from Rule (1) one must exclude the negative adverb οὐ because the imperative does not have a directly negated form (instead μή plus the subjunctive is used), as well as the conjunction ὅτι. Thus, the environments<sup>13</sup> in which pronoun placement can be compared based on the verb-form are represented by the following factors: ‘initial’, ‘co-ordinating conjunction’, ‘reduplicated object’, ‘fronted constituent’, ‘subject’, and ‘temporal expression’.

As was done in the previous section these environments can be grouped into three categories according to the effect that they have on pronoun placement when the verb-form is indicative or subjunctive. Thus, there is ‘preverbal environment’, containing factor ‘fronted constituent’, ‘postverbal environment’, containing factors ‘initial’, ‘co-ordinating conjunction’, and ‘reduplicated object’, and ‘neutral environment’ which contains factors ‘subject’ and ‘temporal expression’.

Cataloguing the data according to these groups reveals that there is a difference between the placement of the pronoun with finite verb-forms on the one hand, and imperative verb-forms, on the other. Except for factor ‘initial’, however, the number of tokens is too small for an investigation of the effect of the other factors, and comes from a limited amount of texts (only 10 for ‘fronted constituent’, for example) so the results, presented in detail in the appendix, are suggestive, not conclusive. Nonetheless, the patterns observed are remarkably different.

For instance, when there is a fronted constituent with a finite verb the pronoun appears preverbally 898 out of 988 times. In the case of the imperative, however, this only happens 15 out of 32 times. Even as a suggestive result, these numbers do not in any way confirm Mackridge’s intuition that whether the verb is in the imperative or indicative/subjunctive form does not affect the placement of the pronoun. Similarly, for the factor ‘subject’ we find no preverbal pronouns if the verb-form is imperative, yet for the finite verb-forms, an immediately preceding subject is associated with preverbal placement 334 out of 464 times. Finally, for ‘temporal expression’ we have 8 preverbal

<sup>13</sup> Since the imperative in LMG appears only in the 2<sup>nd</sup> sg. and pl. forms with rare, highly stylized, and presumably consciously archaizing uses of the 3<sup>rd</sup> sg. or pl. it would seem appropriate to exclude all non-2<sup>nd</sup> person forms from the finite verb-form database. It is, however, a reasonable assumption that the person of the verb-form does not affect the placement of the weak object pronoun, and so it is not necessary to do so.

instances out of 24 when the verb-form is imperative but 86 preverbal instances out of 149 for a finite verb-form.

It seems that although preverbal pronoun placement is possible with imperative verb-forms, it is extremely restricted, especially when compared to the situation with the indicative and subjunctive on the one hand, and the pattern associated with the gerunds on the other. Contrary to Mackridge's observation, then, the imperative—with respect to weak object pronoun placement—behaves more like the gerund than the finite verb-forms.

#### 4 Conclusion

The in-depth examination of variation in LMG pronoun placement presented here has provided concrete evidence for several unexpected results. These were:

- a) the association of the adjective ὅλος in 'doubling pronoun' construction with preverbal pronoun placement, an effect that has not been noticed before,
- b) the fact that neither emphasis of the preverbal element nor the distinction between topic and focus affects pronoun placement,
- c) the inability to disambiguate the pattern of pronoun position in the periphrastic tenses, no matter how detailed or in depth the analysis, and
- d) the ambiguous status of the imperative verb-form which, with respect to pronoun placement at least, patterns almost like the gerund but not entirely so.

Of course, as observations, the above statements do not provide explanations for the pattern of pronoun placement in LMG; rather they pose more and increasingly difficult questions that must be answered in order for the phenomenon to be understood. That task, which includes an examination of the extralinguistic parameters affecting variation, as well as the diachronic development of weak object pronoun position from Early Medieval to Early Modern Greek, is undertaken in Pappas (forthcoming) to which the reader is referred.

## APPENDIX

## A. Raw Counts

| Red. Object<br>Text↓ | with ὅλος |        | without ὅλος |        |
|----------------------|-----------|--------|--------------|--------|
|                      | PRE V     | POST V | PRE V        | POST V |
| <i>Digenēs</i>       | 1         | 5      | 0            | 4      |
| <i>Ptōchoprod.</i>   | 1         | 1      | 0            | 1      |
| <i>Glykas</i>        | 0         | 0      | 0            | 0      |
| <i>Spaneas</i>       | 0         | 1      | 0            | 1      |
| <i>Kallimakhos</i>   | 0         | 3      | 0            | 3      |
| <i>Lybistros</i>     | 2         | 10     | 1            | 7      |
| <i>Achilleid</i>     | 0         | 6      | 0            | 6      |
| <i>Belisarios</i>    | 0         | 1      | 0            | 1      |
| <i>Thrēnos Kon.</i>  | 0         | 6      | 0            | 6      |
| <i>Poulologos</i>    | 2         | 7      | 1            | 6      |
| <i>Paidiophr.</i>    | 0         | 6      | 0            | 6      |
| <i>Physiologos</i>   | 0         | 1      | 0            | 1      |
| <i>Spanos</i>        | 1         | 0      | 1            | 0      |
| <i>Aitōlos</i>       | 5         | 0      | 1            | 0      |
| <i>Moreas</i>        | 0         | 1      | 0            | 1      |
| <i>Tokkoi</i>        | 5         | 4      | 2            | 2      |
| <i>Rimada</i>        | 8         | 4      | 3            | 4      |
| <i>Gioustos</i>      | 4         | 4      | 0            | 3      |
| <i>Depharanas</i>    | 2         | 0      | 1            | 0      |
| <i>Tribōlēs</i>      | 2         | 0      | 0            | 0      |
| <i>Phalieros</i>     | 1         | 1      | 1            | 1      |
| <i>Homilia</i>       | 1         | 0      | 1            | 0      |
| <i>Apokopos</i>      | 0         | 1      | 0            | 0      |
| <i>Apollōnios</i>    | 0         | 4      | 0            | 2      |
| <i>Phlōrios</i>      | 2         | 5      | 1            | 4      |
| <i>Rhodos</i>        | 2         | 3      | 2            | 1      |
| <i>Katalogia</i>     | 0         | 5      | 0            | 5      |
| Total                | 39        | 79     | 15           | 65     |

Table 1: Raw counts concerning the interaction between the presence of ὅλος and pronoun placement in the ‘doubling pronoun’ construction.

| Envrn.→<br>Text↓   | <u>Preverb Environ.</u> |               | <u>Postverb Environ.</u> |               | <u>Neutral Environ.</u> |               |
|--------------------|-------------------------|---------------|--------------------------|---------------|-------------------------|---------------|
|                    | <u>PRE V</u>            | <u>POST V</u> | <u>PRE V</u>             | <u>POST V</u> | <u>PRE V</u>            | <u>POST V</u> |
| <i>Digenēs</i>     | 5                       | 0             | 0                        | 1             | 0                       | 0             |
| <i>Ptochoprod</i>  | 1                       | 0             | 0                        | 0             | 0                       | 0             |
| <i>Glykas</i>      | 1                       | 0             | 0                        | 2             | 1                       | 0             |
| <i>Spaneas</i>     | 0                       | 0             | 0                        | 0             | 0                       | 0             |
| <i>Kallimakhs</i>  | 1                       | 0             | 0                        | 2             | 0                       | 0             |
| <i>Lybistros</i>   | 4                       | 0             | 0                        | 4             | 1                       | 2             |
| <i>Achilleid</i>   | 3                       | 0             | 0                        | 3             | 0                       | 2             |
| <i>Belisarios</i>  | 0                       | 0             | 0                        | 1             | 0                       | 0             |
| <i>Threnos</i>     | 0                       | 0             | 0                        | 0             | 0                       | 1             |
| <i>Poulologos</i>  | 1                       | 0             | 0                        | 3             | 0                       | 0             |
| <i>Paidiophr.</i>  | 0                       | 0             | 0                        | 0             | 0                       | 0             |
| <i>Physiologos</i> | 0                       | 0             | 0                        | 0             | 0                       | 0             |
| <i>Spanos</i>      | 0                       | 0             | 0                        | 0             | 0                       | 0             |
| <i>Aitōlos</i>     | 0                       | 1             | 0                        | 0             | 0                       | 0             |
| <i>Moreas</i>      | 4                       | 0             | 0                        | 0             | 0                       | 0             |
| <i>Tokkoi</i>      | 3                       | 0             | 2                        | 2             | 1                       | 0             |
| <i>Rimada</i>      | 4                       | 0             | 0                        | 4             | 1                       | 2             |
| <i>Gioustos</i>    | 3                       | 0             | 1                        | 2             | 0                       | 0             |
| <i>Depharanas</i>  | 1                       | 0             | 1                        | 1             | 0                       | 0             |
| <i>Tribōlēs</i>    | 1                       | 0             | 0                        | 1             | 0                       | 0             |
| <i>Phalieros</i>   | 7                       | 1             | 0                        | 1             | 0                       | 0             |
| <i>Homilia</i>     | 0                       | 0             | 0                        | 0             | 0                       | 0             |
| <i>Apokopos</i>    | 0                       | 0             | 0                        | 2             | 0                       | 0             |
| <i>Apollōnios</i>  | 1                       | 0             | 0                        | 1             | 0                       | 0             |
| <i>Phlōrios</i>    | 1                       | 0             | 0                        | 4             | 0                       | 0             |
| <i>Rhodos</i>      | 1                       | 1             | 0                        | 1             | 0                       | 0             |
| <i>Katalogia</i>   | 2                       | 0             | 0                        | 2             | 0                       | 0             |
| Total              | 44                      | 3             | 4                        | 37            | 4                       | 7             |

Table 2: Raw counts concerning the interaction between  $\theta \in \lambda \omega$  periphrastic constructions and pronoun placement.

| Envrn.→            | <u>Preverb Environ.</u> |               | <u>Postverb Environ.</u> |               | <u>Neutral Environ.</u> |               |
|--------------------|-------------------------|---------------|--------------------------|---------------|-------------------------|---------------|
| Text↓              | <u>PRE V</u>            | <u>POST V</u> | <u>PRE V</u>             | <u>POST V</u> | <u>PRE V</u>            | <u>POST V</u> |
| <i>Digenēs</i>     | 2                       | 0             | 1                        | 21            | 1                       | 1             |
| <i>Ptōchoprod</i>  | 2                       | 4             | 0                        | 46            | 3                       | 4             |
| <i>Glykas</i>      | 1                       | 2             | 0                        | 40            | 2                       | 4             |
| <i>Spaneas</i>     | 0                       | 0             | 1                        | 10            | 0                       | 2             |
| <i>Kallimakhs</i>  | 0                       | 0             | 0                        | 17            | 0                       | 1             |
| <i>Lybistros</i>   | 0                       | 0             | 0                        | 40            | 0                       | 3             |
| <i>Achilleid</i>   | 1                       | 1             | 0                        | 16            | 1                       | 0             |
| <i>Belisarios</i>  | 0                       | 0             | 0                        | 4             | 0                       | 0             |
| <i>Threnos</i>     | 5                       | 1             | 0                        | 7             | 0                       | 1             |
| <i>Poulologos</i>  | 0                       | 0             | 0                        | 8             | 0                       | 0             |
| <i>Paidiophr.</i>  | 0                       | 0             | 0                        | 0             | 0                       | 0             |
| <i>Physiologos</i> | 0                       | 0             | 0                        | 0             | 0                       | 0             |
| <i>Spanos</i>      | 1                       | 0             | 0                        | 24            | 0                       | 3             |
| <i>Aitōlos</i>     | 0                       | 0             | 0                        | 4             | 0                       | 0             |
| <i>Moreas</i>      | 0                       | 0             | 0                        | 4             | 0                       | 0             |
| <i>Tokkoi</i>      | 0                       | 0             | 0                        | 1             | 0                       | 0             |
| <i>Rimada</i>      | 0                       | 3             | 0                        | 11            | 0                       | 0             |
| <i>Gioustos</i>    | 0                       | 3             | 0                        | 14            | 0                       | 0             |
| <i>Depharanas</i>  | 2                       | 1             | 0                        | 4             | 0                       | 0             |
| <i>Tribōlēś</i>    | 0                       | 0             | 0                        | 3             | 0                       | 0             |
| <i>Phalieros</i>   | 0                       | 0             | 0                        | 26            | 1                       | 3             |
| <i>Homilia</i>     | 0                       | 0             | 0                        | 4             | 0                       | 0             |
| <i>Apokopos</i>    | 0                       | 0             | 0                        | 7             | 0                       | 0             |
| <i>Apollōnios</i>  | 0                       | 0             | 0                        | 6             | 0                       | 0             |
| <i>Phlōrios</i>    | 1                       | 2             | 0                        | 26            | 0                       | 2             |
| <i>Rhodos</i>      | 0                       | 0             | 0                        | 9             | 0                       | 0             |
| <i>Katalogia</i>   | 0                       | 0             | 0                        | 18            | 0                       | 1             |
| Total              | 15                      | 17            | 2                        | 263           | 8                       | 25            |

Table 3: Raw counts concerning the interaction between imperative verb-form and pronoun placement.

## B. Results of OneWay ANOVA

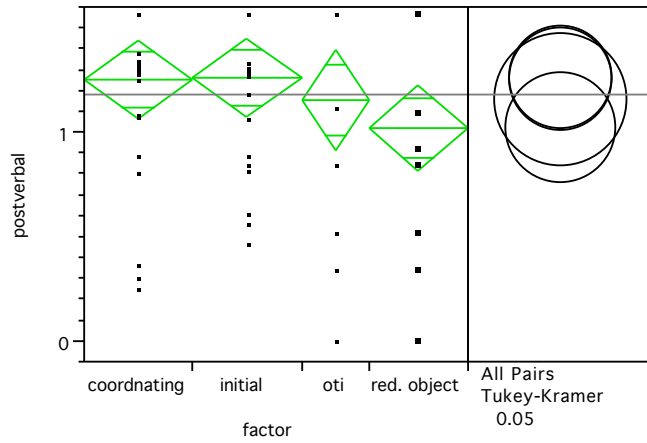


Figure 2: Comparing factors in Mackridge's Rule (1); tokens with ὅλος excluded from factor 'reduplicated object'.

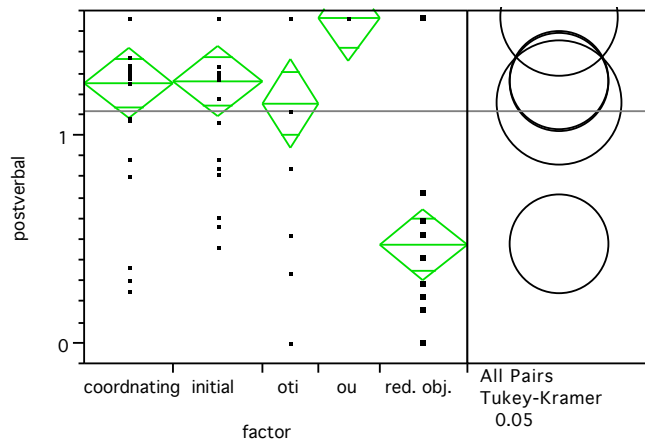


Figure 3: Graph of Anova with ὅλος tokens included in factor 'reduplicated object'.

| Abs(Dif)-LSD | initial  | coordinating | ὅτι      | red. object |
|--------------|----------|--------------|----------|-------------|
| initial      | -0.36507 | -0.35725     | -0.3151  | -0.14235    |
| coordinating | -0.35725 | -0.36507     | -0.32291 | -0.15017    |
| oti          | -0.3151  | -0.32291     | -0.46537 | -0.29721    |
| red. object  | -0.14235 | -0.15017     | -0.29721 | -0.38814    |

Positive values show pairs of means that are significantly different.

Table 4: Comparisons for all pairs using Tukey-Kramer HSD (when ὅλος is excluded)  
q\*=2.61939

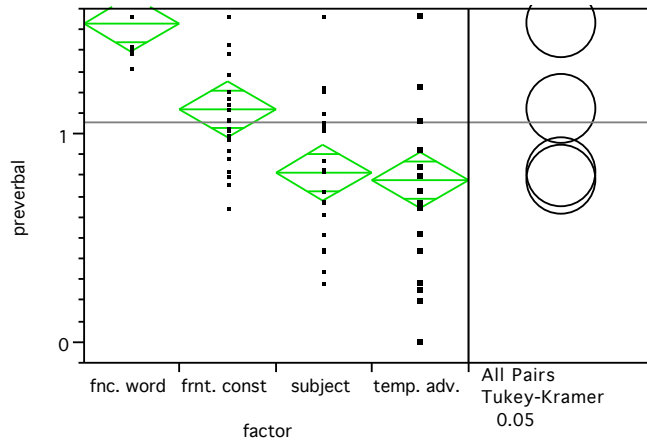


Figure 4: Comparing factors associated with preverbal placement (Mackridge's Rules 2, 3, 4, & 5).

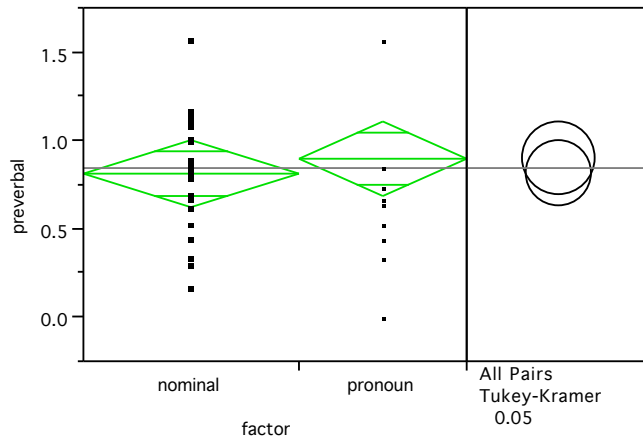


Figure 5: Comparing pronominal vs nominal subjects.

| Abs(Dif)-LSD | pronoun  | nominal  |
|--------------|----------|----------|
| pronoun      | -0.31015 | -0.20641 |
| nominal      | -0.20641 | -0.27202 |

Positive values show pairs of means that are significantly different.

Table 5: Comparisons for all pairs in pronoun vs. nominal subjects using Tukey-Kramer HSD,  $q^*=2.01540$ .



## REFERENCES

### 1. Primary Sources.

- Achilleid* = Διήγησις Ἀχιλλέως. In W. Wagner (ed.), *Trois Poèmes Grecs du moyen-age inédit*, Berlin 1881.
- Aitōlos* = Γεωργίου Αἰτωλοῦ. In Banescu N. (ed.), *Un poème Grec Vulgaire relatif á Pierre Le Boiteux de vallachie*, Bucarest 1906.
- Apōllonios* = Μεταγλώττισμα ἀπὸ Λατινικῆς εἰς Ρωμαϊκὴν διήγησις πολυπαθοῦς Ἀπολλωνίου τοῦ Τυρίου. In W. Wagner (ed.), *Medieval Greek Texts*, Amsterdam 1970.
- Apokopos* = Απόκοπος. In Στυλιανὸς Ἀλεξίου (ed.), *Μπεργαδῆς: Απόκοπος, Ἡ βοσκοπούλα*, Athens 1971.
- Belisarios* = Ἱστορία τοῦ Βελισαρίου, (version χ). In W.F. Bakker & A. F. Gemert (eds.), *Ἱστορία τοῦ Βελισαρίου*, Athens 1988.
- Depharanas I* = Μάρκου Δεφαράνα, ἱστορία ἐκ τοῦ Δανιὴλ περὶ τῆς Σωσάννης. In Γ. Ζώρας (ed.), *Βυζαντινὴ Ποίησις*, [Vasiki Vivliothiki, 1], Athens.
- Depharanas II* = Μάρκου Δεφαράνα, λόγοι διδακτικοὶ πατρὸς πρὸς τὸν υἱόν. In Γ. Ζώρας (ed.), *Βυζαντινὴ Ποίησις*, [Vasiki Vivliothiki, 1], Athens.
- Digenēs* = Βασίλειος Διγενῆς Ἀκρίτης (κατὰ τὸ χειρόγραφο τοῦ Εσκοριάλ). In Στυλιανὸς Ἀλεξίου (ed.), *Βασίλειος Διγενῆς Ἀκρίτης (κατὰ τὸ χειρόγραφο τοῦ Εσκοριάλ), καὶ τὸ ἄσμα τοῦ Ἀρμούρη*, Athens 1985.
- Gioustos* = Πένθος θανάτου, ζωῆς μάταιον καὶ πρὸς Θεὸν ἐπιστροφή. In Γ. Ζώρας (ed.), *Βυζαντινὴ Ποίησις*, [Vasiki Vivliothiki, 1], Athens.
- Glykas* = Στίχοι γραμματικοῦ Μιχαήλ τοῦ Γλυκᾶ οὗς ἔγραψε καθ' ὃν κατεσχέθη καιρὸν ἐκ προσαγγελίας χαιρεκάκου τινός. In Γ. Ζώρας (ed.), *Βυζαντινὴ Ποίησις*, [Vasiki Vivliothiki, 1], Athens.
- Homilia* = Ομιλία τοῦ νεκροῦ βασιλιᾶ. Μ. Ι. Μανούσακας, *Επιστημονικὴ Ἐπετηρὶς Φιλολογικῆς Σχολῆς Πανεπιστημίου Θεσσαλονίκης*, 8: 295-314.
- Katalogia* = Καταλόγια, Στίχοι περὶ ἔρωτος καὶ ἀγάπης. In D. C. Hesseling et Hubert Pernot (ed.), *Erotopaignia (Chansons d'amour)*, Paris 1913.
- Lybistros* = Τὸ κατὰ Λύβιστρον καὶ Ροδάμνην. In W. Wagner (ed.), *Trois Poèmes Grecs du moyen-age inédit*, Berlin 1881.
- Moreas* = Χρονικὸν τοῦ Μορέως (codex Havniensis). In John Schmitt (ed.), *Chronicle of Morea*, Groningen 1967.
- Paidiophr.* = Διήγησις παιδιόφραστος τῶν τετραπόδων ζώων. In Γ. Ζώρας (ed.), *Βυζαντινὴ Ποίησις*, [Vasiki Vivliothiki, 1], Athens.

- Phalieros I* = Ιστορία καὶ Ὀνειρο. In A. F. Gemert (ed.), Μαρίνου Φαλιέρου Ερωτικὰ ὄνειρα, Thessaloniki 1980.
- Phalieros II* = Λόγοι διδακτικοὶ τοῦ πατρὸς πρὸς τὸν υἱὸν. In W.F. Bakker & A. F. Gemert (eds.), *The Λόγοι Διδακτικοὶ of Marinos Phalieros*, Leiden 1977.
- Phlōrios* = Φλώριος καὶ ΠλατZIAφλώρα. In W. Wagner (ed.), *Medieval Greek Texts*, Amsterdam 1970.
- Physiolog.* = Εκ τοῦ Φυσιολόγου. In F. Sbordone (ed.), *Physiologus*, Milan 1936.
- Poulologos* = Ο Πουλολόγος. In Ισαβέλλα Τσαβάρη (ed.), *Ο Πουλολόγος*, Athens 1987.
- Ptōkhoprodromos* = Πτωχοπροδρομικά. In Hans Eideneier (ed.), *Ptochoprodromus*, Cologne 1991.
- Rhodos* = Εμμανουήλ Γεωργιλᾶ, τὸ θανατικὸν τῆς Ρόδου. In W. Wagner (ed.), *Medieval Greek Texts*, Amsterdam 1970.
- Spaneas* = Σπανέας, Αλεξίου Κομνηνοῦ, ποίημα παραινετικόν. In Γ. Ζώρας (ed.), *Βυζαντινὴ Ποίησις*, [Vasiki Vivliothiki, 1], Athens.
- Spanos* = Σπανός. In Hans Eideneier (ed.), *Spanos: eine byzantinische Satire in der Form einer Parodie*, Berlin 1977.
- Thrēnos* = Θρήνος τῆς Κωνσταντινουπόλεως. In W. Wagner (ed.), *Medieval Greek Texts*, Amsterdam 1970.
- Tokkoi* = Τὸ Χρονικὸ τῶν Τόκκων. In Giuseppe Schiro (ed.) *Cronaca dei Tocco di Cefalonia*, Rome 1975.
- Tribōlēs I* = Ιακώβου Τριβώλη, ἱστορία τοῦ Ρέ τῆς Σκωτίας. In Γ. Ζώρας (ed.), *Βυζαντινὴ Ποίησις*, [Vasiki Vivliothiki, 1], Athens.
- Tribōlēs II* = Ιακώβου Τριβώλη, ἱστορία τοῦ Ταγιαπέρα. In Γ. Ζώρας (ed.), *Βυζαντινὴ Ποίησις*, [Vasiki Vivliothiki, 1], Athens.

## 2. Secondary Sources.

- ABEILLE, ANNE and DANIELÉ GODARD. 1996. The Complementation of French Auxiliaries. Unpublished ms. Université de Paris 7.
- ANDROULAKIS, ANNA. 1998. Wh- and Direct Object Clitics Revisited. *Themes in Greek linguistics II*, ed. by Brian D. Joseph, Geoffrey C. Horrocks and Irene Philippaki-Warbuton, 131-168. Amsterdam; Philadelphia: Benjamins.
- BECK, HANS-GEORG. 1993. *Historia tēs Vyzantinēs dēmōdous logotechnias*. Nikē Eideneier (transl.). Athēna: Morphōtiko Hidryma Ethnikēs Trapezēs.
- BROWNING, ROBERT. 1983. *Medieval and Modern Greek*. Cambridge: Cambridge University Press.
- EWEN, ROBERT. 1979. *A Grammar of Bulgarian Clitics*. Doctoral dissertation, University of Washington.

- HABERLAND, HARTMUT and JOHAN VAN DER AUWERA. 1990. Topics and Clitics in Greek Relatives. *Acta Linguistica Hafniensia*, 22: 127-58.
- HALPERN, AARON. 1996. On the Placement and Morphology of Clitics. Stanford: CSLI Publications.
- HORROCKS, GEOFFREY, C. 1983. The Order of Constituents in Modern Greek. Order, Concord and Constituency, ed. by G. Gazdar, E. Klein, and G. K. Pullum, 95-111. Dordrecht: Foris.
- — —. 1990. Clitics in Greek. A diachronic review. *Greek Outside Greece II*, ed. by M. Roussou and S. Panteli, 35-52. Athens: Diaspora Books.
- — —. On Condition . . .: Aspect and Modality in the History of Greek. *Proceedings of the Cambridge Philological Society*, 41: 153-73.
- — —. *Greek: A history of the language and its speakers*. London, New York: Longman Linguistics Library
- JANNARIS, ANTONIUS N. 19ng Hildesheim.
- JANSE, MARK. 1994. Son o68. *Historical Greek Grammar*. Georg Olms Verlagsbuchhandlung Wackernagel: The Distribution of Object Clitic Pronouns in Cappadocian. *Themes in Greek linguistics: papers from the first International Conference on Greek Linguistics, Reading, September 1993*, ed. by Irene Philippaki-Warbuton, Katerina Nicolaidis, Maria Sifianou, 435-442. Amsterdam; Philadelphia: Benjamins.
- — —. 1998. Cappadocian Clitics and the Syntax-Morphology Interface. *Themes in Greek Linguistics II*, ed. by G. Horrocks, B. D. Joseph and I. Philippaki-Warbuton I. Amsterdam; Philadelphia: Benjamins.
- JANSSEN MARJOLINE. 1998. Η πρόταξη καὶ ἐπίταξη τοῦ ἀδύνατου τύπου τῆς προσωπικῆς ἀντωνυμίας τὴν ἐποχὴ τοῦ Ἑρωτόκριτου καὶ τῆς Θυσίας τοῦ Ἀβραάμ. *Cretan Studies*, 6: 129-143.
- JOSEPH, BRIAN D. 1978/1990. Morphology and universals in syntactic change: evidence from medieval and modern Greek. New York: Garland Pub. (Updated version of 1978 Harvard University Ph. D. Dissertation, printed and distributed by Indiana University Linguistics Club.)
- — —. 1981. On the synchrony and diachrony of Modern Greek NA. *Byzantine and Modern Greek Studies*, 7: 139-154
- — —. 1983a. The synchrony and diachrony of the Balkan infinitive : a study in areal, general, and historical linguistics. Cambridge; New York: Cambridge University Press.
- — —. 1983b. Relativization in Modern Greek: Another look at the accessibility hierarchy constraints. *Lingua* 60.1-24.
- — —. 1985. Complementizers, Particles, and Finiteness in Greek and the Balkans. *Folia Slavica*, 7.3: 390-411.
- — —. 2000. Textual Authenticity: Evidence From Medieval Greek. *Textual Parameters in Ancient Languages*, ed. by S. Herring, P. van Reenen, and L. Schoesler, 309-329. Amsterdam; Philadelphia: Benjamins.
- JOSEPH, BRIAN D. and IRENE PHILIPPAKI-WARBURTON. 1987. *Modern Greek*. London ; Wolfeboro, N.H.: Croom Helm.

- KAZAZIS, KOSTAS and JOSEPH PENTHEROUDAKIS. 1976. Reduplication of Indefinite Direct Objects in Albanian and Modern Greek. *Language* 52: 398-403.
- MACKRIDGE, PETER. 1985. The modern Greek language: a descriptive analysis of standard modern Greek. Oxford ; New York : Oxford University Press.
- — —. 1993. An editorial problem in the medieval greek texts: the position of the object clitic pronoun in the Escorial Digenes Akrites. *Ἀρχές τῆς νεοελληνικῆς λογοτεχνίας, Πρακτικά τοῦ δευτέρου διεθνoῦς συνεδρίου "Neograeca Medii Aevi"*, ed. by N. M. Panayiotakis, 325-342. Venice.
- — —. 1995. Η θέση τοῦ ἀδύνατου τύπου τῆς προσωπικῆς ἀντωνυμίας στὴ Μεσαιωνικὴ Δημώδη Ἑλληνικὴ. *Greek Studies in Linguistics*, 15: 906-929.
- NEVIS, JOEL A. and BRIAN D. JOSEPH. 1992. Wackernagel Affixes: Evidence from Balto-Slavic (with Joel A. Nevis). *Yearbook of Morphology* 5: 93-111.
- NEVIS, JOEL A., BRIAN D. JOSEPH, DIETER WANNER, and ARNOLD M. ZWICKY. 1994. *Clitics: A Comprehensive Bibliography 1892-1991*. Amsterdam; Philadelphia: Benjamins.
- PAPPAS, PANAYIOTIS A. 2000. Unus testis, nullus testis? The significance of a single token in a problem of Later Medieval Greek Syntax. *The Ohio State Working Papers in Linguistics*, 54: 171-176.
- — —. 2001. Αριθμοὶ καὶ Διαίσθηση. Μέθοδοι γιὰ τὴ μελέτη τοῦ συντακτικοῦ τῶν Μεσαιωνικῶν Ἑλληνικῶν. *Greek Studies in Linguistics* 21: 597-605.
- PHILIPPAKI-WARBURTON, IRENE. 1977. Modern Greek Clitic Pronouns and the 'Surface Structure Constraints' Hypothesis. *Journal of Linguistics*, 13:259-281.
- — —. 1985. Word order in Modern Greek. *Transactions of the Philological Society*,. 113-143.
- STAVROU, MELITA. 1986. Η κλιτικὴ ἀντωνυμία στὶς περιοριστικὲς ἀναφορικὲς προτάσεις ἄμεσου ἀντικειμένου ποὺ εἰσάγονται μὲ τὸ *που*. *Studies in Greek Linguistics*, 6: 151-160.
- WANNER, DIETER. 1981. Pragmatics and Syntax in Portuguese Clitic Placement. *Current Research in Romance Languages*, ed. by James P. Lantolf, and Gregory B. Stone, 194-206. Bloomington, Indiana: Indiana University Linguistics Club.
- WARBURTON, IRENE (=PHILIPPAKI-WARBURTON). The Passive in English and Greek. In *FLang*: 563-78.
- WOODS, A., P. FLETCHER, and A. HUGHES. 1986. *Statistics in language studies*. Cambridge; New York: Cambridge University Press.